Department of LABOR AND INDUSTRIES

ERGONOMICS
Worker Protection

Ergonomics demonstration project: Sawmills

Need

Sawmills in Washington State have had a high rate of Work-Related Musculoskeletal Disorders (WMSDs). Typical injuries in the sawmill industry involve hands, wrists, elbows and shoulders. These injuries result in significant financial and personal cost to workers and employers.

As one of the 12 industries in the state with high numbers and rates of WMSDs, sawmills are one of the first industries that need to comply with the ergonomics rule. In early 2000, the Department of Labor and Industries contacted representatives of the sawmill industry about a joint project to reduce WMSDs.

Goals

The goals of the sawmill demonstration project are to:

- Demonstrate that sawmills can identify risk factors and hazards covered by the ergonomics rule.
- Identify ways to reduce or eliminate these hazards in compliance with the rule.
- Share information from the project with the industry through a handbook, education materials and workshops.

Project design

The project team included L&I staff and sawmill representatives from business and labor. The team was formed two months before L&I adopted the ergonomics rule. Team members decided at the outset to focus solely on developing examples the sawmill industry could use to meet the requirements of the proposed rule.

Handling lumber is physically demanding work and these jobs make up a large portion of the sawmill workforce. Handling lumber in most sawmills involves nine different processes, whether the mill produces lumber, fence posts or other materials. The project team determined that these nine processes were most often related to the high numbers of WMSDs in sawmills.

Five sawmills agreed to be demonstration sites. The mills ranged in size from small to a large, self-insured mill. They included automated and non-automated work processes. Project teams visited the mills to study work processes, interview workers and supervisors, and film work activities for more detailed laboratory evaluation. The team studied the videotapes to identify risk factors and conditions under which these risk factors became hazards as defined by the rule. Then team members brainstormed ways to reduce the hazards and the potential for injury. Solutions often came from industry team members sharing ideas from their own mills or others they had seen.

Several sawmills that did not participate in the project have agreed to review and evaluate the handbook materials before they are published.

Timetable

March 2000.....Hold initial meeting
July 2000 .....Complete project plan and assemble team
January 2001.....Complete site evaluations and brainstorm solutions
May 2001.....Complete laboratory evaluation of data/images
November 2001.....Publish handbook and educational materials

Results

The project will result in three products the entire industry can use to help implement the ergonomics rule.

- A handbook that identifies ergonomic risk factors that typically cause WMSDs for lumber handlers in sawmills. The handbook will explain how these risk factors become hazards under the ergonomics rule, and list ways to reduce the hazards.
- An ergonomics education program for sawmills will emphasize the nine work processes studied in this project. The education materials will be provided as a PowerPoint presentation on CD-ROM.
- L&I and industry partners in the project will conduct workshops to discuss the project and introduce the handbook and CD-ROM to other sawmills.